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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,326	09/25/2003	Manabu Nakano	108075-00118	4139

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ARENT FOX PLLC  
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WASHINGTON, DC 20036

EXAMINER

SHIN, CHRISTOPHER B

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/669,326

Applicant(s)

NAKANO, MANABU

Examiner

Christopher B. Shin

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 09252003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. For example, the claimed invention is directed to switching between two interface converters according to a checking result.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al. (2002/0081873).

a. As for claims 1-7, in figures 2 & 4, Harris et al. teaches all of the equivalent functions of converting USB standard and ATA or ATAPI standards. Furthermore, the Harris reference accomplishes conversion function that is identical to the claimed invention. However, the teachings of Harris reference does not describe in great details, but one skilled in the art can easily understand operations and functions of converting different standards, as claimed. For example, the bridge chip (100) comprehensively tech the functions and structures of the first, second & switching controller of the claimed invention.

Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of Harris reference for the reasons stated above.

b. As for claims 8-9, the limitations regarding the encoding, decoding and error correction code are not expressly disclosed by the Harris reference; however, such limitations are notoriously well known and commonly practiced technique in the art of data transfer system for maintaining error free reliability. The examiner takes official notice on such well/commonly known standard technique.

c. As for the claims 13-15, due to similarity between the claims, the teachings of the claims 1-9 are similarly applied.

d. Claims 10-12 and 16-17 are method version claims of that are substantially identical to the apparatus claims 1-9; therefore the teachings of claims 1-9 are similarly applied.

4. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deng et al. (2005/0060479).

e. As for claims 1-7, in figures 2 & 4, Deng et al. teaches all of the equivalent functions of converting USB standard and ATA or ATAPI standards.

Furthermore, the Deng reference accomplishes conversion function that is identical to the claimed invention. However, the teachings of Deng reference does not describe in great details, but one skilled in the art can easily understand operations and functions of converting different standards, as claimed. For

example, the bridge chip (100) comprehensively tech the functions and structures of the first, second & switching controller of the claimed invention.

Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art to come up with the claimed invention from the teachings of Deng reference for the reasons stated above.

f. As for claims 8-9, the limitations regarding the encoding, decoding and error correction code are not expressly disclosed by the Deng reference; however, such limitations are notoriously well known and commonly practiced technique in the art of data transfer system for maintaining error free reliability. The examiner takes official notice on such well/commonly known standard technique.

g. As for the claims 13-15, due to similarity between the claims, the teachings of the claims 1-9 are similarly applied.

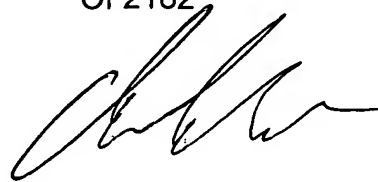
h. Claims 10-12 and 16-17 are method version claims of that are substantially identical to the apparatus claims 1-9; therefore the teachings of claims 1-9 are similarly applied.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher B. Shin whose telephone number is 571-272-4159. The examiner can normally be reached on 6:30-5:00 M,Tu,Th,F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 571-272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Shin  
Primary Examiner  
Of 2182

A handwritten signature in black ink, appearing to read 'Chris Shin', written over the printed name.

August 5, 2005  
CBS